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10/710,317

07/01/2004

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07/18/2006

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EXAMINER

WALSH, DANIEL I

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/710,317 | | BONALLE ET AL. | |
| | Examiner | | Art Unit | |
| | Daniel I. Walsh | | 2876 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of Amendment received on 24 April 2006.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claims 1-52, the claims recite verifying whether the proffered signature scan sample is associated with a preset transaction limitation impendent of a financial account transaction limitation. The Examiner notes that this is vague/indefinite because the Examiner believes that the transaction limitation associated with the signature is related, albeit different, to an account limitation. For example, a transaction limitation of the signature would not exceed a transaction limitation of the card (maximum credit limit) so it is unclear how the transaction limitation of the signature is independent from the account limitation, if the signature must conform and not exceed the maximum credit line available, for example. The Examiner has interpreted the limitations as the signature provides additional security.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-9, 11-15, 19-30, 32-40, and 42-47, 49, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black (US 2005/0122209) in view of Baer (US 2005/0232471).

Re the pending claims, the Examiner notes that Black teaches a transponder can be a smartcard (paragraph [0014]) for example.

Re claim 1, Black teaches a smartcard configured to communicate with a reader, a reader configured to communicate with the system, a signature scan sensor configured to detect a proffered signature scan sample, the signature scan sensor configured to communicate with the system, and a device configured to verify the proffered signature scan sample to facilitate a transaction (abstract and FIG. 1A).

Re claim 2, the sensor is configured to communicate with the system via at least one of a smartcard, reader, and network (FIG. 1A).

Re claim 3, the signature scan sensor is configured to facilitate a finite/limited number of scans (namely one).

Re claim 4, Black teaches the sensor is configured to log at least one of a detected scan sample, processed scan sample, and stored scan sample (FIG. 5A+, paragraph [0125], and FIG. 10A+).

Re claims 5-6 and 44 Black teaches (col 6, lines 56+) that the customer record can be stored locally or remotely. Though silent to a datapacket stored on a database, Black teaches the customer record can include biometric information, user information, etc. (FIG. 5A+ for example), which is interpreted as a datapacket. It would have been obvious to store such information on a database, in order to have a well known and conventional means of storing data for retrieval and organization. It would have been obvious to store the data remotely (or locally) based on security needs, as recognized in the art.

Re claim 7, it has been discussed above that samples are received and stored for providing security/authentication. It would have been obvious to one of ordinary skill in the art that such samples would be received by an authorized sample receiver in order to ensure security and reliability.

Re claims 8 and 36, though silent to a LCD screen or digitizing tablet, Black teaches a digital surface (FIG. 1A). Therefore, it would have been obvious to use a specific type of digital surface (LCD/tablet), as a well known and conventional means of capturing a signature accurately and easily.

Re claim 9, though silent to verifying at least one of shape, speed, stroke, stylus pressure, timing information, and character width/height the Examiner notes that at least one of such means (shape for example) are well known and conventional means for matching signatures. One would have been motivated to use such techniques to compare and match/authenticate signatures.

Re claim 11, the proffered signature is compared to a stored to verify the signatures, as discussed above.

Re claim 12, Black teaches (FIG. 1A) that the host computer can store the reference data. The Examiner notes it would have been obvious to store the sample in a third party security vendor or government agency as a means to provide secure storage. As the system of Black can be used for point of sale transactions, for example, it would have been obvious that the host computer is remote from the transaction, thus providing access while also protecting data and providing security, as it is stored at a central location. It is understood that a third party vendor or government agency could provide such security, and therefore is an obvious expedient for such data storage security.

Re claim 13, as the sample is stored, its interpreted as registered.

Re claim 14, Black teaches that a customer's account is linked to the biometric/signature data and can be used for payment and is linked to a credit or debit account (col 6, lines 46+ and abstract).

Re claim 15, the system of Black can be used by numerous individuals, who inherently have different information.

Re claim 19, though Black is silent to the sensor providing notification upon detection of a sample, the Examiner notes it is well within the skill in the art to provide such notification in order to inform the user that the sample is received/being processed, as a means to inform the user. As Black indicates when a sample has been authorized (transaction allowed), it would have been obvious to indicate when a sample is read/detected as a means to guide the user through the transaction. Additionally, the Examiner notes that the mere authorization of a transaction can be broadly interpreted as providing notification upon detection of a sample because authorization cannot occur unless the sample was detected. Additionally, the Examiner notes that providing guidance to users involved in a transaction is an obvious expedient, well within the ordinary skill in the art.

Re claim 20, it has been discussed above that the device facilitates a financial transaction.

Re claims 21 and 33, though silent to secondary security procedures, the Examiner notes that such procedures (PIN, codes, passwords, etc) are all well known and conventional in the art for increased security. One would have been motivated to use such procedures for increased security. Additionally, the Examiner notes that the verification of the biometric samples of Black (separate from the signature sample), such as fingerprints, is also interpreted as a secondary security procedure.

Re claim 22, Black teaches proffering a signature scan to a signature scan sensor communicating with the system to initiate verification of a signature scan sample for facilitating authorization of a transaction (abstract, FIG. 1A, and as discussed above).

Re claim 23, the Examiner has interpreted the storing of the signature scan sample as it being registered with an authorized sample receiver.

Re claim 24, the Examiner notes that registering includes proffering the same (abstract, FIG. 5A, as discussed above).

Re claim 25, the limitations have been discussed above re claim 8.

Re claim 26, the Examiner notes that proffering includes initiating at least one of storing, comparing, and verifying the sample, as discussed above.

Re claim 27, the limitations have been discussed above re claim 6. The Examiner notes that a database is an obvious expedient, and that processing such information contained in at least the smartcard/reader/sensor/server/reader system is an obvious expedient to reliably authenticate a user during the attempted transaction.

Re claim 28, it has been discussed above that the proffered sample is compared with a stored sample.

Re claim 29, the Examiner notes the storing by a third party/government agency has been discussed above re claim 12. As comparison has been discussed above, it would have been obvious that reference data compared is used to permit a transaction.

Re claim 30 the limitations have been discussed above re claim 9.

Re claim 32, though Black is silent to second proffered signature samples, the Examiner notes that it would have be obvious to one of ordinary skill in the art that the method/system of the present invention would apply to multiple users, and as such, would obvious include multiple proffered samples (first, second, third, etc., depending on the number of unique users).

Re claim 34, the limitations have been discussed above.

Re claim 35, Black teaches that the sample is detected at a sensor configured to communicate with the system via one of a smartcard/reader/network (FIG. 1A-1C).

Re claim 37, it has been discussed above that the sample is detected/stored/processed (abstract).

Re claim 38, the limitations have been discussed above re claim 3.

Re claim 39, Black teaches logging each sample by a transaction record (paragraph [0125]).

Re claim 40, the Examiner notes that it would have been obvious to one of ordinary skill in the art to log the samples at least temporarily, in order for them to be verified (stored in a buffer for example during comparison). Additionally, the examiner notes that storing/logging the signatures associated with a transaction (more permanently then in a buffer) are well known and conventional in the art for recording keeping purposes (also see paragraph [0125] which teaches a transaction record).

Re claim 42, the limitations have been discussed above re claim 11.

Re claim 43, the limitations have been discussed above re claim 9.

Re claim 45, the Examiner notes that verifying the sample using information contained on one of a local database/remote database/third party controlled database would have been an obvious expedient in instances where the data is stored remote from the smartcard, as discussed above, for security concerns. A remote database provides a preferred means to organize data for efficient and easy storage and retrieval, and is conventional in the art.

Re claim 46, the limitations have been discussed above re claim 12.

Re claims 47, and 49, and 51 the claimed preset transaction limitation has been discussed above.

Black is silent to a device to verify whether the signature scan sample is associated with a preset transaction limitation independent of a financial account transaction limitation.

Baer teaches such limitations (paragraph [0037]). Though Baer is silent to using signature scans, signature scans have been discussed above re Black. The Examiner notes that biometric samples are well known to include signature, iris scans, fingerprints, etc. The Examiner notes that as Baer teaches additional security levels based on biometrics, and Black teaches the claimed signature biometrics, it would have been obvious to use the biometrics of Black with the levels of Baer, as signatures are just an alternative biometric, and can be chosen based on system design choices, user convenience, etc.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black with those of Baer.

One would have been motivated to do this in order to provide different levels of security. Increased security based on the probability of authentication is well known and conventional in the art, where PIN and secondary security procedures can be used to authorize transaction of certain amounts/types as well.

4. Claims 15, 32, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Baer, as discussed above, in view of Martizen et al. (US 2002/0191816).

Re claims 15, 32, and 40 the teachings of Black/Baer have been discussed above.

Black/Baer is silent to different samples (of the same person) associated with a different one of personal information, credit card information, etc.

Martizen et al. teaches different biometric samples associated with different personal information (different fingers with different accounts) (FIG. 6A). The Examiner notes that the signature (as claimed) is interpreted as a biometric.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black with those of Martizen et al.

One would have been motivated to do this in order to permit multiple accounts to be accessed with personalized security.

Though Martizen et al. is drawn towards different fingerprints, the Examiner maintains that it is well known and conventional in the art that different biometrics can be used to control access (voice, fingerprints, retina scans, signatures, etc). Accordingly, the Examiner believes that Martizen can be relied upon for the teachings of different samples to control access, where the type of biometric sample chosen, would have been obvious to one of ordinary skill in the art, given that there are numerous recognized and interchangeable biometrics that are accepted to control access.

5. Claims 10, 31, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Baer, as discussed above, in view of Black '956 (US 6,307,956).

Re claims 10, and 31, and 41, the teachings of Black/Baer have been discussed above.

Black/Baer is silent to detecting and verifying false signature devices and thermal patterns.

Black '956 teaches that as part of identity verification, additional sensors to monitor finger temperatures and position of the index finger can be used to authenticate an individual (col 19, lines 57+). This is interpreted as detecting/verifying signatures through thermal/temperature

patterns, and is believed to include detecting false signature devices/false signatures in as much is disclosed by the specification.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Baer with those of Black '956.

One would have been motivated to do this for increased security.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Baer/Martizen et al., as discussed above, in view of Moebs et al. (US 2005/0065872).

Re claim 16, the teachings of Black/Baer/Martizen et al. have been discussed above.

Martizen et al. teaches a biometric sample is associated with at least one of a first user account, wherein the first account comprises personal information, credit card information, etc. and the first account is different than the second account (different samples), but it silent to primary and secondary associating.

Moebs et al. teaches that a customer can avoid overdraft by preauthorized the institution to tie the customers checking account into the other accounts (paragraph [0017]). The Examiner notes that such protection is well known in the art, and is interpreted to include primary and secondary associating. It would be obvious for the accounts to have the information in order to keep track and identify them.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Baer/Martizen et al. with those of Moebs et al.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Baer, as discussed above, in view of Teicher et al. (US 6,257,486).

Re claim 17, the teachings of Black/Baer have been discussed above.

Black/Baer is silent to mutual authentication upon verification of the proffered signature scan sample.

The Examiner notes that mutual authentication is well known and conventional in the art, as a security measure.

It would have been obvious to one of ordinary skill in the art to authenticate upon verification of a sample, as a means to ensure security. Specifically, Teicher et al. teaches mutual authentication being completed between a reader and a card for security (col 7, lines 35+).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Baer with those of Teicher et al.

One would have been motivated to do this in order to employ well-known security measures.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Baer, as discussed above, in view of Goodman (US 2002/0043566).

Re claim 18, the teachings of Black/Baer have been discussed above.

Black/Baer is silent to deactivation of the smartcard when the signature sample is rejected.

Goodman teaches deactivation of a card if a predetermined amount of failed PIN attempts are detected (paragraph [0029]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Baer with those of Goodman et al.

One would have been motivated to do this in order to increase system security. For example, if a person attempting to illegally use the smartcard was unable to correctly sign (match the stored signature), disabling the smartcard would provide security for the rightful owner, while still permitting them to make a mistake themselves without their device being disabled.

9. Claims 48, 50, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black/Baer, as discussed above, in view of Wallace (US 5,988,497).

The teachings of Black/Baer have been discussed above.

Black/Baer are silent to a second sample to override a transaction limitation.

Wallace teaches multiple tiers of authentication in order to authenticate a transaction that meets certain conditions (abstract).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Black/Baer with those of Wallace.

One would have been motivated to do this to provide more authentication for certain transactions, as it is known in the art that additional samples can provide additional security. The replacing of the additional PINs of Wallace, by an alternative means of providing security, such as biometrics, is an obvious expedient to provide more secure transactions.

Additional Remarks

10. The Examiner notes that there are numerous art recognized biometric means of identification (signature, fingerprint, retinal scan, voice print, DNA, etc.). The Examiner believes it is obvious to one of ordinary skill in the art that the teachings of above cited biometric security references in reference to different types of biometrics could be applied to the specific

biometric of signatures, as means to provide biometric security for users. The fact that a reference may disclose a particular type of biometric being used does not preclude such teachings as being non-obvious when used with a different type of biometric, as interpreted by the Examiner. The selection of a well known type of biometric is well within the skill in the art, and can be based upon desired user convenience, amount of intrusion to a user, system constraints, etc.

Response to Arguments

11. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

In response to the newly added limitation reciting a device to verify whether the proffered scan sample is associated with a present transaction limitation independent of a financial account transaction limitation, the Examiner has cited the art to Baer, above, which teaches such limitations for security purposes.

The Examiner has cited the art to Wallace for teaching of an additional sample, as discussed above.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

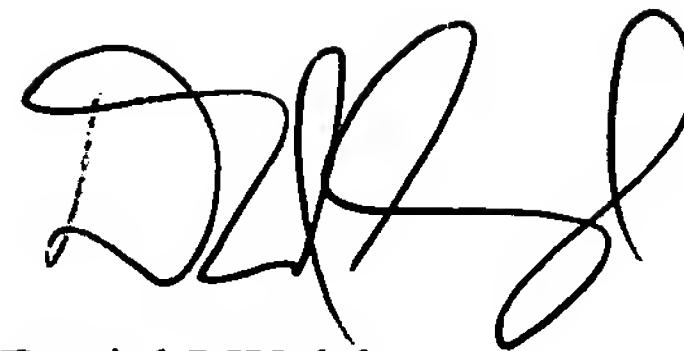
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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D. Walsh

A handwritten signature in black ink, appearing to read 'DW', with a large loop at the end.

Daniel I Walsh
Examiner
Art Unit 2876
7-3-06